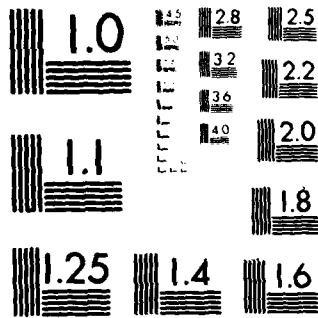


ARMY ELECTRONICS RESEARCH AND DEVELOPMENT COMMAND WS--ETC F/G 4/2
19703B MLRS, MISSILE NUMBER 34, 37, ROUND NUMBERS B-88, B-89, 1--ETC(U)
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DR 1130
FEBRUARY 1980

AD

ADA 087461

METEOROLOGICAL DATA REPORT

19703B MLRS
Missile Numbers 34, 37
Round Numbers B-88, B-89
12 February 1980

by

White Sands Meteorological Team

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ATMOSPHERIC SCIENCES LABORATORY
WHITE SANDS MISSILE RANGE, NEW MEXICO

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UNITED STATES ARMY ELECTRONICS COMMAND

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INTRODUCTION

19703B MLRS, Missile Numbers 34, 37, Round Numbers B-88, B-89, were launched from LC-39, White Sands Missile Range (WSMR), New Mexico, at 1625:07 & 1741:19 MST, 12 February 1980.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

1. Observations

a. Surface

(1) Standard surface observations to include pressure, temperature ($^{\circ}\text{F}$), relative humidity, dew point ($^{\circ}\text{F}$), wind direction and speed, and cloud cover were made at the "C" Station Met Site.

(2) Monitor of wind speed and direction from one anemometer was provided in the launch control room.

b. Upper Air

(1) Low level wind data were obtained from RAPTS T-9 pibal observation at:

SITE AND ALTITUDE

LC-39 2 Km

SMR 2 Km

(2) Air structure data (rawinsonde) were collected at the following Met Sites.

SITE AND TIME

WSD 1600 MST

LC-37 1715 MST

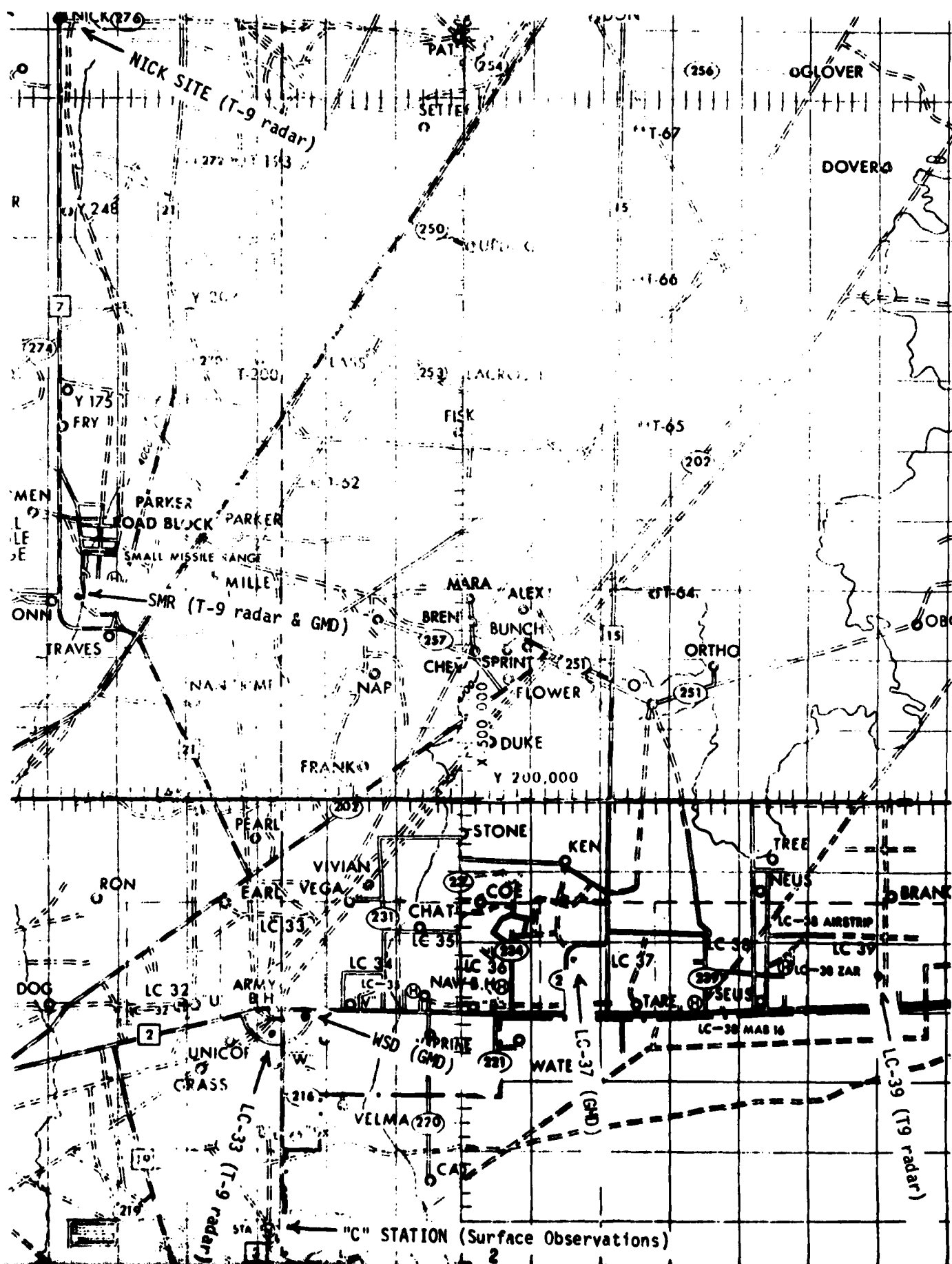


TABLE 1

SURFACE OBSERVATIONS OBTAINED FROM "C" STATION ON 12 February 1980

TIME MST	SKY CONDITIONS	OVER CAST	WIND DIRECTION 10 KTS	WIND SPEED KTS	TEMP AIR	TEMP SURF	TEMP WIND	TEMP WIND
0058	CLR	20		25.975	28	23	160	02
0158	CLR	20		25.980	26	24	120	06
0258	CLR	20		25.970	26	20	300	06
0358	CLR	20		25.975	24	15	120	05
0458	CLR	20		25.975	26	18	220	03
0558	CLR	20		25.975	27	21	280	02
0658	250-SCT	30		25.990	25	18	130	02
0758	250-SCT	40		26.015	27	21	360	04
0858	250-BKN	40		26.030	34	27	360	02
0958	250-BKN	40		26.030	42	30	030	02
1058	E250-BKN	40		26.020	47	32	1270	03
1158	E250-BKN	40		25.990	53	35	180	11
1258	60SCTE250-BKN	40		25.945	58	30	200	11
1358	60SCTE250-BKN	40		25.925	54	29	220	11
1458	60SCTE250 BKN	40		25.910	58	31	210	08
1558	60SCTE250-BKN	40		25.900	58	31	310	08
1658	60SCTE250-BKN	40		25.895	56	29	230	10
1758	60SCTE250-BKN	40		25.900	51	30	220	08
1858	250SCT	10		25.915	46	29	230	05
1958	CLR	10		25.930	42	30	170	04
2058	CLR	10		25.945	40	30	150	04
2158	CLR	10		25.955	38	29	090	02
2258	CLR	10		25.950	38	31	E100	06
2358	CLR	20		25.940	35	31	200	07

PILOT BALLOON MEASURED WIND DATA

TABLE 2

RELEASED FROM SMR DATE 12 Feb 80 TIME 1544 MST

TRACKER COORDINATES (WSTM) X= 472,441.28 Y= 214,137.54 H= 3999.00

NOTE: WIND DIRECTIONS ARE REFERENCED TO TRUE NORTH

HEIGHTS ARE METERS AGL X OR FEET AGL .

[illegible][illegible][illegible]

PILOT BALLOON MEASURED WIND DATA

TABLE 3

RELEASED FROM LC-39

DATE: 12 February 1980

TIME 1600 MST

TRACKER

COORDINATES (WSTM)

X = 530.938.82

Y= 186,564.96

$$H = 4063.75$$

NOTE: WIND DIRECTIONS ARE REFERENCED TO TRUE NORTH

HEIGHTS ARE METERS AGL X OR FEET AGL .

[illegible][illegible][illegible]

PILOT BALLOON MEASURED WIND DATA

TABLE 4

RELEASED FROM LC-39

DATE 12 February 1980

TIME 1735 MST

TRACKER

COORDINATES (WSTM)

$$X = 530,938.82$$
$$Y = 186,564.96$$

H= 4063.75

NOTE: WIND DIRECTIONS ARE REFERENCED TO TRUE NORTH

HEIGHTS ARE METERS AGL X OR FEET AGL .

[illegible][illegible][illegible]

STATION ALTITUDE 3989.00 FEET MSL
12 FEB. 60 1600 HRS MSL
ASCENSION NO. /1

SIGNIFICANT LEVEL DATA
0430020071
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 5

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE		REL. HUM. PERCENT
	AIR DEGREES	DEWPOINT CENTIGRADE	
877.0	12.8	2.9	51.0
850.0	9.9	-0.9	47.0
770.2	2.2	-5.0	56.0
700.0	-5.0	-7.9	60.0
688.0	-6.2	-8.0	67.0
677.2	-6.2	-15.4	48.0
659.2	-5.0	-19.0	50.0
641.4	-5.4	-20.2	50.0
573.2	-11.3	-24.7	32.0
500.0	-19.6	-31.4	34.0
455.2	-24.4	-36.0	33.0
400.0	-32.3	-40.8	42.0
377.6	-35.8	-43.6	43.0
345.0	-40.5	-43.6	70.0
315.2	-45.1	-49.7	59.0
300.0	-48.0		
269.1	-54.0		
258.1	-54.3		
250.0	-56.1		
242.2	-57.0		
216.4	-53.1		
200.0	-51.7		

STATION ALTITUDE 3909.00 FEET MSL
12 FEB. 60 1600 HRS MSL
ASCENSION NO. /1

UPPER AIR DATA
0430020071
WHITE SANDS

GEODETTIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 6

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
3909.0	877.0	12.8	51.0	1065.0	659.9	0	0	1.000272
4000.0	876.6	12.8	50.9	1064.7	659.8	242.9	0	1.000272
4500.0	860.8	11.1	48.6	1052.1	657.7	242.9	1.5	1.000265
5000.0	845.2	9.5	47.5	1039.2	655.7	242.9	2.9	1.000258
5500.0	829.6	8.0	49.2	1025.5	654.0	242.9	4.3	1.000254
6000.0	814.4	6.6	50.9	1011.9	652.3	242.9	5.8	1.000249
6500.0	799.4	5.1	52.6	998.6	650.8	258.4	4.0	1.000245
7000.0	784.7	3.7	54.3	985.5	648.8	299.7	2.7	1.000241
7500.0	770.2	2.2	56.0	972.6	647.1	280.3	2.8	1.000237
8000.0	755.7	0.8	60.8	959.2	645.4	262.6	3.5	1.000234
8500.0	741.4	-0.7	65.6	946.0	643.7	258.7	7.8	1.000230
9000.0	727.4	-2.1	70.4	933.1	642.0	255.4	10.8	1.000227
9500.0	713.6	-3.5	75.2	920.4	640.3	240.3	10.8	1.000223
10000.0	700.1	-5.0	80.0	907.9	638.5	242.7	11.0	1.000220
10500.0	686.7	-6.2	82.3	894.6	637.1	244.2	11.3	1.000216
11000.0	673.5	-6.0	44.3	877.2	637.1	244.6	11.5	1.000205
11500.0	660.5	-5.1	31.4	857.8	638.1	244.4	11.6	1.000198
12000.0	647.9	-5.3	30.0	841.9	637.9	240.2	11.3	1.000194
12500.0	635.4	-5.9	30.2	827.6	637.1	248.6	10.8	1.000191
13000.0	623.0	-6.9	30.5	814.7	635.9	250.1	10.4	1.000187
13500.0	610.9	-8.0	30.9	802.0	634.6	254.0	10.3	1.000184
14000.0	599.1	-9.0	31.2	789.6	633.4	260.3	10.9	1.000181
14500.0	587.5	-10.0	31.6	777.3	632.1	263.3	12.4	1.000178
15000.0	576.1	-11.0	31.9	765.2	630.9	264.9	14.2	1.000175
15500.0	564.6	-12.2	32.2	753.5	629.5	265.0	14.9	1.000172
16000.0	553.4	-13.4	32.5	741.9	628.0	265.7	15.7	1.000169
16500.0	542.4	-14.7	32.8	730.6	626.5	267.7	16.6	1.000166
17000.0	531.5	-15.9	33.1	719.5	625.0	267.6	17.7	1.000164
17500.0	520.9	-17.1	33.4	708.5	623.5	266.1	19.1	1.000161
18000.0	510.6	-18.3	33.7	697.7	622.0	264.0	20.6	1.000158
18500.0	500.4	-19.6	34.0	687.1	620.5	263.3	22.3	1.000156
19000.0	490.2	-20.6	33.8	676.0	619.2	262.8	24.4	1.000153
19500.0	480.1	-21.7	33.6	664.9	617.9	262.4	26.5	1.000150
20000.0	470.3	-22.7	33.3	654.1	616.6	263.1	27.1	1.000148
20500.0	460.7	-23.8	33.1	643.4	615.3	263.6	27.5	1.000145
21000.0	451.2	-24.9	33.6	633.1	613.8	263.2	27.1	1.000143
21500.0	441.7	-26.2	35.1	623.1	612.2	262.3	27.1	1.000140
22000.0	432.5	-27.5	36.6	613.2	610.6	261.1	27.4	1.000138
22500.0	423.4	-28.8	38.0	603.6	609.0	262.2	27.4	1.000136
23000.0	414.5	-30.1	39.5	594.1	607.4	263.2	27.4	1.000134

STATION ALTITUDE 3989.00 FEET MSL
12 FEB 60 1600 HRS MST
ASCENSION NO. 71

UPPER AIR DATA
0430020071
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 6 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION, DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
23500.0	405.8	-31.4	41.0	584.7	605.8	263.8	27.4	1.000131
24000.0	397.2	-32.7	42.1	575.5	604.1	264.3	27.2	1.000129
24500.0	388.7	-34.0	42.5	566.2	602.5	264.9	27.0	1.000127
25000.0	380.4	-35.4	42.9	557.2	600.8	264.5	27.7	1.000125
25500.0	372.1	-36.6	47.4	547.9	599.3	263.7	28.5	1.000123
26000.0	364.0	-37.7	54.0	538.5	597.8	261.9	29.6	1.000121
26500.0	356.0	-38.9	60.6	529.3	596.3	260.6	30.4	1.000119
27000.0	348.3	-40.0	67.2	520.3	594.9	259.9	31.0	1.000117
27500.0	340.6	-41.2	68.4	511.4	593.4	259.6	30.7	1.000115
28000.0	333.0	-42.3	65.7	502.5	591.9	259.6	29.9	1.000113
28500.0	325.0	-43.4	62.9	493.7	590.5	259.0	29.6	1.000111
29000.0	316.3	-44.6	60.2	485.2	589.0	259.0	29.4	1.000109
29500.0	311.2	-45.9	43.7**	476.9	587.4	261.3	29.2	1.000107
30000.0	304.2	-47.2	16.4**	468.9	585.6	263.1	28.9	1.000105
30500.0	297.2	-48.5		460.9	583.9	263.6	27.8	1.000103
31000.0	290.4	-49.8		452.9	582.2	268.0	27.1	1.000101
31500.0	283.7	-51.1		445.0	580.5	269.9	26.6	1.000099
32000.0	277.1	-52.4		437.3	578.8	270.5	25.8	1.000097
32500.0	270.7	-53.7		429.7	577.2	270.6	24.9	1.000096
33000.0	264.4	-54.1		420.6	576.6	265.0	25.8	1.000094
33500.0	258.2	-54.3		411.0	576.3	259.5	27.2	1.000092
34000.0	252.2	-55.6		403.8	574.6	258.4	32.0	1.000090
34500.0	246.2	-56.5		396.0	573.4	254.3	36.6	1.000088
35000.0	240.4	-56.7		387.0	573.1	254.9	39.4	1.000086
35500.0	234.8	-55.9		376.5	574.2	255.0	42.0	1.000084
36000.0	229.2	-55.1		366.2	575.3	253.1	43.9	1.000082
36500.0	223.9	-54.3		356.3	576.4	251.7	46.0	1.000079
37000.0	218.6	-53.5		346.6	577.4	252.3	49.3	1.000077
37500.0	213.5	-52.9		337.6	578.2			1.000075
38000.0	208.6	-52.4		329.2	578.8			1.000073
38500.0	203.7	-52.0		320.9	579.3			1.000071

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3989.00 FEET MSL
12 FEB. 80 1600 HRS MST
ASCENSION NO. 71

MANDATORY LEVELS
0430020071
WHITE SANDS

GEODETTIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 7

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM.		WIND DATA	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	DEWPOINT PERCENT	PERCENT	DIRECTION DEGREES(TN)	SPEED KNOTS	
850.0	4844.	9.9	-0.9	47.	242.9	2.5	
800.0	6483.	5.2	-3.7	53.	257.6	4.0	
750.0	8197.	.2	-6.1	63.	249.4	4.9	
700.0	9995.	-5.0	-7.9	80.	242.7	11.0	
650.0	11903.	-5.2	-20.0	30.	245.7	11.3	
600.0	13953.	-8.9	-22.6	31.	259.8	10.8	
550.0	16144.	-13.8	-26.7	33.	266.4	16.0	
500.0	18493.	-19.6	-31.4	34.	263.3	22.4	
450.0	21034.	-25.1	-36.4	34.	263.1	27.1	
400.0	23801.	-32.3	-40.8	42.	264.1	27.3	
350.0	26843.	-39.8	-43.7	60.	260.0	30.8	
300.0	30241.	-48.0			264.6	28.3	
250.0	34108.	-56.1			255.5	33.6	
200.0	38800.	-51.7					

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

GEODETIC COORDINATES
32.41141 LAT DEG
106.30652 LON DEG

SIGNIFICANT LEVEL DATA
0430180004
LC-37

STATION ALTITUDE 4047.27 FEET MSL
12 FEB. 80 1715 HRS MST
ASCENSION NO. 4

TABLE 8

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE		REL. HUM. PERCENT
		AIR	DEWPOINT	
875.1	4047.3	12.8	-3.5	32.0
850.0	4845.7	10.1	-2.2	42.0
746.8	8322.5	.8	-5.8	81.0
700.0	10013.9	-5.0	-6.6	87.0
678.6	10815.2	-5.7	-22.1	26.0
659.8	11541.0	-4.1	-22.6	22.0
624.0	12980.1	-6.5	-24.1	23.0
500.0	18535.3	-19.2	-33.0	28.0
473.0	19886.0	-22.0	-36.2	26.0
424.6	22464.1	-28.6	-40.3	31.0
400.0	23860.1	-32.3	-38.6	52.0
392.4	24304.6	-33.2	-39.0	52.0
374.0	25409.2	-35.9	-39.0	73.0
344.4	27276.8	-40.5	-43.6	72.0
333.0	28029.1	-42.2	-46.7	81.0
316.6	29146.6	-45.1	-49.6	80.0
300.0	30323.7	-47.9		
260.2	33364.8	-55.3		
250.0	34203.6	-56.1		
227.4	36188.5	-55.9		
218.6	37018.0	-54.7		
205.6	38312.5	-54.0		
200.0	38898.0	-52.9		
162.0	43401.3	-50.6		
150.0	45044.7	-53.4		

GEODETIC COORDINATES
32.41141 LAT DEG
106.30852 LON DEG

UPPER AIR DATA
0430180004
LC-37

TABLE 9

STATION ALTITUDE 4047.27 FEET MSL
12 FEB. 80
ASCENSION NO. 4 1715 HRS MSL

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
4047.3	875.1	12.8	32.0	1063.9	659.5	00	0.0	1.000259
4500.0	860.8	11.3	37.7	1052.0	657.7	234.0	.7	1.000258
5000.0	845.1	9.7	42.8	1038.5	655.9	234.6	1.6	1.000256
5500.0	829.5	8.3	45.6	1024.2	654.4	234.6	2.4	1.000252
6000.0	814.2	7.0	48.3	1010.2	652.8	234.9	3.2	1.000248
6500.0	799.2	5.7	51.0	996.4	651.2	241.9	4.9	1.000245
7000.0	784.5	4.3	53.8	982.7	649.7	244.0	6.5	1.000241
7500.0	770.0	3.0	56.5	969.3	648.1	240.5	7.7	1.000237
8000.0	755.8	1.7	59.2	956.2	646.5	238.6	8.6	1.000234
8500.0	741.7	.2	63.7	943.4	644.7	229.9	9.0	1.000230
9000.0	727.7	-1.5	71.4	931.4	642.7	226.6	9.5	1.000228
9500.0	713.9	-3.2	79.1	919.5	640.7	228.0	10.1	1.000225
10000.0	700.4	-5.0	86.8	907.9	638.6	234.4	10.8	1.000222
10500.0	686.9	-5.4	90.0	892.8	637.8	245.5	12.1	1.000210
11000.0	673.8	-5.3	95.0	875.8	637.8	251.7	12.2	1.000201
11500.0	660.8	-4.2	22.2	855.5	639.1	250.2	11.2	1.000196
12000.0	648.2	-4.9	22.3	841.2	638.3	251.7	10.1	1.000192
12500.0	635.7	-5.7	22.7	827.6	637.3	248.4	9.6	1.000189
13000.0	623.5	-6.5	23.0	814.3	636.3	251.6	10.5	1.000186
13500.0	611.2	-7.7	23.5	801.7	634.9	254.0	11.3	1.000183
14000.0	599.1	-8.8	23.9	789.3	633.5	257.9	11.5	1.000180
14500.0	587.5	-10.0	24.4	777.1	632.1	260.2	11.9	1.000177
15000.0	575.7	-11.1	24.8	765.1	630.8	260.5	12.5	1.000174
15500.0	564.5	-12.3	25.3	753.3	629.4	261.7	13.6	1.000171
16000.0	553.2	-13.4	25.7	741.7	628.0	264.0	15.7	1.000168
16500.0	542.5	-14.5	26.2	730.2	626.6	265.5	17.8	1.000166
17000.0	531.6	-15.7	26.6	719.0	625.2	268.1	19.9	1.000163
17500.0	521.1	-16.8	27.1	708.0	623.8	268.4	21.9	1.000160
18000.0	510.8	-18.0	27.5	697.1	622.4	264.2	23.5	1.000158
18500.0	500.7	-19.1	28.0	686.4	621.0	262.4	25.1	1.000155
19000.0	490.5	-20.2	27.3	675.3	619.7	260.2	26.0	1.000152
19500.0	480.6	-21.2	26.6	664.3	618.4	258.3	26.6	1.000150
20000.0	470.7	-22.3	26.2	653.6	617.1	258.7	25.7	1.000147
20500.0	461.0	-23.6	27.2	643.3	615.5	255.8	25.2	1.000145
21000.0	451.4	-24.9	28.2	633.3	613.9	258.6	25.7	1.000142
21500.0	442.1	-26.1	29.1	623.4	612.3	257.2	26.1	1.000140
22000.0	432.9	-27.4	30.1	613.6	610.8	257.5	26.2	1.000138
22500.0	423.9	-28.7	31.5	604.1	609.2	257.0	25.3	1.000136
23000.0	415.0	-30.0	39.1	594.5	607.5	257.2	25.6	1.000134
23500.0	406.2	-31.3	46.6	585.1	605.9	257.0	23.6	1.000132

STATION ALTITUDE 4047.27 FEET MSL
12 FEB. 68 1715 HRS MST
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UPPER AIR DATA
0430180004
LC-37

GEODETTIC COORDINATES
32.41141 LAT DEG
106.30852 LON DEG

TABLE 9 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (TN) SPEED KNOTS	INDEX OF REFRACTION
24000.0	397.6	-32.6	52.0	575.6	604.3	256.8	1.000130
24500.0	389.1	-33.7	55.7	565.9	602.9	256.6	1.000127
25000.0	380.7	-34.9	65.2	556.6	601.4	256.4	1.000125
25500.0	372.5	-36.1	73.0	547.4	599.8	256.3	1.000123
26000.0	364.4	-37.4	72.7	538.2	598.3	256.1	1.000121
26500.0	356.4	-38.6	72.4	529.2	596.7	256.0	1.000119
27000.0	348.6	-39.8	72.1	520.4	595.1	257.5	1.000117
27500.0	341.0	-41.0	64.7	511.6	593.6	257.9	1.000115
28000.0	333.4	-42.1	61.4	502.8	592.2	258.3	1.000113
28500.0	326.0	-43.4	60.6	494.3	590.5	258.0	1.000111
29000.0	318.7	-44.7	60.1	486.0	588.8	258.1	1.000109
29500.0	311.5	-45.9	42.0**	477.6	587.2	259.2	1.000107
30000.0	304.5	-47.1	16.5**	469.3	585.7	260.3	1.000105
30500.0	297.5	-48.3		461.0	584.1	261.7	1.000103
31000.0	290.7	-49.5		452.8	582.6	263.2	1.000101
31500.0	283.9	-50.8		444.8	581.0	264.5	1.000099
32000.0	277.4	-52.0		436.9	579.4	266.2	1.000097
32500.0	270.9	-53.2		429.1	577.8	268.4	1.000096
33000.0	264.7	-54.4		421.5	576.2	267.8	1.000094
33500.0	258.5	-55.4		413.7	574.8	264.3	1.000092
34000.0	252.4	-55.9		404.8	574.2	260.4	1.000090
34500.0	246.5	-56.1		395.6	574.0	256.7	1.000088
35000.0	240.7	-56.0		386.1	574.1	255.3	1.000086
35500.0	235.0	-56.0		376.9	574.1	255.4	1.000084
36000.0	229.5	-55.9		367.0	574.2	255.6	1.000082
36500.0	224.1	-55.4		358.5	574.6	255.7	1.000080
37000.0	218.8	-54.7		349.9	575.0	255.6	1.000078
37500.0	213.7	-54.4		340.3	576.1	255.0	1.000076
38000.0	208.7	-54.2		332.0	576.5	254.4	1.000074
38500.0	203.6	-53.6		323.4	577.2	253.9	1.000072
39000.0	199.0	-52.8		314.8	578.2	253.7	1.000070
39500.0	194.4	-52.6		307.1	578.6	253.6	1.000068
40000.0	189.9	-52.3		299.7	578.9	254.4	1.000067
40500.0	185.6	-52.1		292.4	579.2	255.4	1.000065
41000.0	181.3	-51.8		285.3	579.6	255.4	1.000064
41500.0	177.1	-51.6		278.4	579.9	255.3	1.000062
42000.0	173.0	-51.3		271.6	580.2	254.0	1.000060
42500.0	169.0	-51.1		265.1	580.6	252.3	1.000059
43000.0	165.1	-50.8		258.6	580.9	249.9	1.000058
43500.0	161.3	-50.8		252.6	581.0	247.0	1.000056

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4047.27 FEET MSL
 12 FEB. 80 1715 HRS MST
 ASCENSION NO. 4

UPPER AIR DATA
 0430180084
 LC-37

GEODETTIC COORDINATES
 32.41141 LAT DEG
 106.30852 LON DEG

TABLE 9 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
4400.0	157.3	-51.6		247.7	579.8			1.000055
4450.0	153.9	-52.3		242.9	578.7			1.000054
4500.0	150.3	-53.3		238.2	577.6			1.000053

STATION ALTITUDE 9047.27 FEET MSL
12 FEB. 68
ASCENSION NO. 4

MANDATORY LEVELS
0430180004
LC-37

GEODEIC COORDINATES
32.41141 LAT UEG
106.30852 LONG UEG

TABLE 10

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE		REL. HUMID. PERCENT	WIND DATA	
		AIR DEGREES CENTIGRADE	DEWPOINT DEGREES CENTIGRADE		DIRECTION DEGREES (TN)	SPEED KNOTS
850.0	4842.	10.1	-2.2	42.	234.0	1.3
800.0	6483.	5.7	-3.6	51.	241.8	4.9
750.0	8202.	1.1	-5.7	60.	233.8	8.8
700.0	10004.	-3.0	-6.8	87.	234.6	10.9
650.0	11916.	-4.7	-23.0	22.	252.0	10.2
600.0	13967.	-8.7	-25.7	24.	257.7	11.5
550.0	16158.	-13.7	-29.1	26.	264.6	16.4
500.0	18510.	-19.2	-33.0	28.	262.3	25.1
450.0	21053.	-25.0	-38.1	28.	256.7	25.8
400.0	23821.	-32.3	-38.8	52.	256.8	24.2
350.0	26866.	-39.6	-42.7	72.	257.3	31.0
300.0	30265.	-47.9			261.2	28.4
250.0	34131.	-56.1			258.9	36.4
200.0	38806.	-52.9			253.7	58.8
175.0	41642.	-51.4			254.9	
150.0	44925.	-53.4				67.4

.. AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN LINE INTERPOLATION.

LMED
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